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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,387	04/19/2006	Tomer Spector	200309501-3	2362

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HEWLETT PACKARD COMPANY  
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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
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RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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1795

NOTIFICATION DATE	DELIVERY MODE
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03/13/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/576,387	<b>Applicant(s)</b> SPECTOR ET AL.	
	<b>Examiner</b> Christopher RoDee	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-19 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-19 and 21-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/19/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Information Disclosure Statement***

Reference WO 97/04363 has been considered as listed in the IDS of 19 April 2006. All other references indicated as considered or not considered are for the same reasons as given in the last Office action.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4, 6-19 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1,086,753 in view of *Handbook of Imaging Materials* to Diamond, pp. 242-247 & 254-257.

This rejection was presented in the last Office action. The claims have been amended for matters of form and remain of the same scope as previously presented. Thus, the rejection remains applicable for the reasons given in the 17 September 2008 Office action.

Applicants traverse this rejection because, as it is understood, aluminum tristearate is not a charge adjuvant. A review of the specification shows that charge adjuvants in general and aluminum tristearate in particular are well known in the art. As discussed on specification page 1, lines 17-19, "A charge director is also added to the dispersion to induce charge on the particles. As known in the art, a charge adjuvant may be added to increase the charging effect of the charge director." Further, as discussed on page 1, lines 28-30, "The use of aluminum stearates as charge adjuvants is widely described in the literature. These materials are

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generally solid at room temperature and not soluble to any great extent in the carrier liquid used in the toner at room temperature.” It is readily apparent from the specification disclosure that aluminum tristearate is a charge adjuvant. The fact that the GB document and Diamond do not specifically use the term “charge adjuvant” to describe the aluminum tristearate is not controlling because the GB document does use aluminum tristearate and the specification admits this compound is a charge adjuvant. Based on applicants admissions it is readily apparent that the person of ordinary skill in the art would recognize aluminum tristearate as a charge adjuvant. The Examiner recognizes that aluminum tristearate may have more than one function in the liquid developer art – as a charge adjuvant (see specification admission) and as a charge director (see Diamond) – but applicants are reminded that they are claiming a compound in the process. The same compound is disclosed in the GB document as is acknowledged in the instant specification as a charge adjuvant. The GB document meets the requirements of the instant process of disclosing a solid charge adjuvant.

Applicants also traverse the rejection because the amine disclosed in the GB document is not identified as a charge director. The Examiner recognized this and cited Diamond for its disclosure of including charge directors in liquid developers. As stated in the last Office action, “The reference does not specifically disclose that the resin is a thermoplastic resin and does not disclose the addition of a charge director as the last step of the process...” and “Diamond also teaches that charge directors are conventionally added to toners to ensure proper charge on the toner particles (p. 244).” The Examiner recognized that the disclosed amine may function as a charge director, but specifically relied on Diamond because the Examiner was not factually certain of this position. Consequently, applicants detailed discussion of amines not being factually established as charge directors is agreed with, but this does not obviate the rejection because the Examiner recognized the same issue. The Examiner cited Diamond for it’s

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disclosure of charge directors and provided the conclusions "It would also have been obvious to add a charge director to the GB document's liquid toner because Diamond teaches that charge directors are conventionally added to liquid developers to ensure proper charge on the toner particles in a liquid developer."

On page 8 of the response, applicants are understood to take the position although the GB document teaches that the aluminum tristearate and another component must be in solution at a temperature used for development, this does not "bear a relation to dissolving a solid material by heating a carrier liquid." The response recognizes that the GB teaches that the developer materials must be in solution, but does not the document does not state how the materials are dissolved. Applicants also take the position that the Examiner's conclusions must be of "substantial evidence" for findings of fact and cited MPEP 2144.03. The Examiner never took the position that the GB factually stated the developer materials were dissolved by heating in the carrier liquid. Rather, the Examiner took the position "It would also have been obvious to heat the mixture of the aluminum stearate and toner particles in order to ensure dissolution of the stearate in the mineral spirits because heating of a liquid to enhance solubility of a solid component is ubiquitous and common knowledge in the chemical arts and would have been an obvious expedient to the artisan the ensure the dissolved state of the salt as desired by the reference. The artisan would expect that heating would soften the resin, particularly because the toner resins are designed to soften or melt during the fixing process". The Examiner did not take Official Notice as is discussed in MPEP 2144.03. The Examiner's conclusion of obviousness is based on a preponderance of the evidence, as is discussed in MPEP 2142. This section of the MPEP states in pertinent part,

"The ultimate determination of patentability is based on the entire record,  
by a preponderance of evidence, with due consideration to the persuasiveness of

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any arguments and any secondary evidence. *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). The legal standard of 'a preponderance of evidence' requires the evidence to be more convincing than the evidence which is offered in opposition to it. With regard to rejections under 35 U.S.C. 103, the examiner must provide evidence which as a whole shows that the legal determination sought to be proved (i.e., the reference teachings establish a prima facie case of obviousness) is more probable than not."

The Examiner has applied this standard. It is more probable than not that a skilled artisan would heat the liquid developer materials to dissolve them in the mineral spirits. Based on a totality of the evidence and considering the art as a whole from the view of one of ordinary skill in the art, the Examiner maintains the position that the skilled artisan would have found it obvious to heat the mixture of the aluminum stearate and toner particles in order to ensure dissolution of the stearate in the mineral spirits (i.e., the carrier liquid).

Applicants specifically traverse the rejection of claim 2 because the applied art does not disclose mixing the thermoplastic resin with the carrier liquid, heating the mixture, and then cooling. However, the GB document liquid developer must have its components well dispersed in the carrier liquid to develop an electrostatic latent image with sufficient detail (see Background of the Invention, p. 1, l. 6-13). Diamond also recognizes that the toner materials must be well dispersed by milling (§ 7.4) to form fine particles (§ 7.5). The GB document specifically states that small particles are desired (p. 1, l. 33-35 & 55-57). A process of heating the thermoplastic resin in the carrier liquid so that the resin can be milled into fine particles would have been obvious to the skilled artisan.

Applicants also specifically traverse the rejection over claim 3 because it is not known to dissolve a charge adjuvant in a carrier liquid. The Examiner cannot agree with this position

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because GB Example 1 discloses a process of forming a liquid developer concentrate by dissolving an aluminum tristearate salt. As noted above, heating to dissolve would have been obvious because heating of a liquid to enhance solubility of a solid component is ubiquitous and common knowledge in the chemical arts. The rejection of this claims is proper and will be maintained. Claims 16-18, similarly, remain obvious to one of ordinary skill at the time the invention was made because heating of a solid material is known to enhance its solubility in a given liquid.

The rejection of the claims is proper and is maintained.

### ***Conclusion***

Those rejections not repeated are withdrawn.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on Monday to Thursday from 5:30 to 4:00 Eastern Time.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher RoDee/  
Primary Examiner  
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11 March 2009